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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,498	01/18/2001	Kevin P. Cowan	VI/00-012	6536
21140 75	90 01/12/2005		EXAMINER	
GREGORY L BRADLEY			DESANTO, MATTHEW F	
MEDRAD INC ONE MEDRAD DRIVE		ART UNIT	PAPER NUMBER	
INDIANOLA, PA 15051			3763	
•			DATE MAILED: 01/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		09/765,498	COWAN ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Matthew F DeSanto	3763			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)[Responsive to communication(s) filed on 27 Oc	ctober 2004.				
2a)⊠	This action is FINAL . 2b) This	action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
4) ☐ Claim(s) 1,3,6-10,12,13,32,33 and 35-73 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 35-39 is/are allowed. 6) ☐ Claim(s) 1,3,6-10,12,13,32,33 and 40-73 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.						
Applicati	on Papers					
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachmen	• •	_				
2) 🔲 Notic 3) 🔲 Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary (Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:				

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 2, 3, 6, 7, 8, 9, 10, 12, 13, 32, 33, are rejected under 35 U.S.C. 102(e) as being anticipated by Aasmul et al. (USPN 6,533,183).

Aasmul et al. discloses a length of material that can be used on syringes that consists of indicators that represent a code when a light beam (electromagnetic energy) is transmitted and reflected from the length of material (notches and grooves) therefore, providing information about the syringe. (Figures 1,2,3,4,5 and Paragraph [0002], [0003], [0011], [0041], and entire reference).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 1-3, 6-10, 12, 13, 32, 33, 40-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitchins et al. (USPN 5,944,694) and further in view of Aasmul et al. as applied to claims 1-3, 6-10,12, 13, 32, 33, and further in view of Atherton (USPN 5,461,239)

Hitchins et al. disclosed syringe for use with powered injector to inject fluid into a patient comprising a syringe with a plurality of indicators along a length of material of the syringe wall, wherein the syringe comprises a body, a plunger, a mounting flange, a drip flange, but fails to disclose the workings of an optical sensing system that reflects and refracts the light beams to form the code that provides information about the syringe and the different depth of the angled surfaces.

Aasmul et al. discloses a length of material that refracts and reflects light to provide information about the syringe, but fails to disclose the use of different depths within the length of propagating material.

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Atherton discloses the use of a length of material that can have different shapes, size, and geometry, which allow for recognition in an optical memory diffraction system. The different shapes and sizes and geometry of the material are used to produce a binary code, which is then detected by the optical memory system.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Hitchins et al. with Aasmul et al. and Atherton because Aasmul et al. teaches that adding a length of material comprising notches and grooves, wherein the length of material allows light to be reflected and refracted; which provides for a more accurate way of coding information on medical devices regardless of what the information might be (Aasmul Column 1, line 55 – Column 2, line 14). The reason to combine the teachings of Atherton with Hitchins et al. and Aasmul et al. is because Atherton disclosed that the optical memory diffraction grating uses a plurality of spaced ridges of different shapes and sizes (angled surfaces with different depth) to produce a binary code that provides information with regards to the object being scanned. Therefore the teachings of Artherton further support Aasmul et al. as well as provide more information that was known at the time of the invention about optical scanning and how light being reflected can be used to obtain information.

Allowable Subject Matter

6. Claims in condition for allowance 35-39.

Response to Arguments

7. Applicant's arguments filed 1/20/04 have been fully considered but they are not persuasive.

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- 8. With regards to Aasmul, the applicant argues that there is no teaching of propagating light through the cartridge and wherein the light that enters the cartridge is detectable. The examiner disagrees with the applicant's interpretation of the claims and the prior art because Aasmi et al. has the same structure as the claimed invention which is a length of material that has indicators. Aassmi et al. discloses the same structure, as well as the same composition for the structure. According to MPEP section 2114, an apparatus claim must have a structurally different element in order to be patentable. Since the examiner does not seem any different in structure the rejection stands.
- 9. The examiner interpretations of Aassmi et al. are that Aassmi et al. would be capable of performing the function and intended use that is described in the claims. Light would be capable of being propagated, and light would be capable of interacting with the indicators concurrently. Therefore, the applicant maintains his rejections.
- 10. Since the applicant uses "adapted" and "substantially," this broadens the claims, as well as relies on functional language to overcome the prior art, as opposed to structural limitations, especially when this is a device claim.
- 11. The examiner has found claims 35-39 to be in allowable form, because of the interaction with the sensor and how the light will interact with the syringe in order to provide information.
- 12. The examiner understands that the prior art is different that then invention, but the applicant fails to claim the invention in the right scope to overcome the prior art. A suggestion would be to include the sensor system in the claim or add more structure.

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Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew F DeSanto whose telephone number is 571-272-4957. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick LUCCHESI can be reached on (571) 272-4977. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew DeSanto Art Unit 3763 January 5, 2005

NICHOLAS D. LUCCHESI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700